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Regulations and Non-Regulatory Revisions to State Implementation Plan: Maine

Atlantic Environmental Associates, Inc.
Waltham, MA

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

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Regulations and Non-Regulatory Revisions to State Implementation Plan: Maine

By

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Contract No. 68-02-3565

EPA Project Officer: Willis P. Beal

Prepared for

U.S ENVIRONMENTAL PROTECTION AGENCY
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

July 1981

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16. ABSTRACT

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA-approved State and/or local air pollution control regulations cited by reference in the Federal Register; regulations promulgated as of August 1, 1981 have been included in this document.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979. State and/or local air quality regulations which have not been Federally approved as of August 1, 1981, are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations. A summary sheet of the regulatory revisions is provided to give a quick historical assessment of the changes.

The second part of the document contains the text of non-regulatory SIP revisions approved by EPA up to August 1, 1981, excluding notices or certifications of public hearings and technical support data. A complete tabulation of these revisions is also provided.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
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PREFACE

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA approved State and/or local air pollution control regulations cited by reference in the Federal Register; all regulations Federally promulgated as of August 1, 1981 have been included.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979.* State and/or local air quality regulations which have not been Federally approved as of August 1, 1981 are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State or local agencies to enforce such regulations.

This document is not intended to provide a tool for determining the enforceability of any given regulation. Rather, it is intended to provide a comprehensive compilation of those regulations which are incorporated by reference into Title 40, Part 52, of the Code of Federal Regulations (CFR). The exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation in this document does not, in itself, render the regulation enforceable by either the State or EPA.

The regulations have been organized in this document according to the official State/local agency format. However, since State air quality regulations vary widely in their organization, content, and language, a standardized subject index has been added. The index listings consist of both pollutant and activity oriented categories to facilitate usage. For example, regulations which apply to copper smelters may be found under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State are not included herein but can be found under Title 40 Code of Federal Regulations, Part 52.

Additionally, a summary sheet of the regulatory revisions is included to provide a quick historical assessment of the changes. These summary sheets contain the date of submittal to EPA of each revision and the Federal Register publication date on which the revision was approved by EPA. A brief description of the regulation which was submitted is also included.

In accordance with the Act, the second part of the document contains non-regulatory SIP revisions approved by EPA up to August 1, 1981. All approved non-regulatory revisions listed under Identification of Plan in the CFR are included except notices or certifications of public hearings, and technical support data. Non-regulatory submittals which have only received EPA approval on selected elements are included in their entirety with an accompanying indication of the status of Federal actions on the non-approved elements. The non-regulatory revisions have been organized in this document

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* Regulations and Non-Regulatory Revisions to State Implementation Plan: Maine, EPA-450/2-80-026, prepared under Contract 68-02-3388, July 31, 1980.

according to the date of publication of EPA approval in the Federal Register. For historical completeness, a complete tabulation of these revisions is provided at the beginning of this second section.

SUMMARY OF
EPA-APPROVED REGULATORY REVISIONS TO STATE OF MAINE SIP
BETWEEN JULY 1, 1979 AND JULY 31, 1981

Publication of Approval	Submittal Date	Page	Document Description
01/30/80	05/01/79 10/26/79 12/20/79	45FR6786	Plans to meet various Clean Air Act (including Part C) requirements. Included is a plan for review of construction and operation of new and modified major stationary sources of pollution in attainment areas. Chpaters 100, 108, 113.
02/19/80	05/01/79	45FR10774	Regulations 100, 108, 110, 143, 214, approved. Regulations 100, 108, 113, revised
02/19/80	10/26/79	45FR10774	Revisions to a visible emission regulation and amendments to Chapter 6.
02/19/80	12/20/79	45FR10774	Revised narrative of Chapter 6 of the SIP, review of new sources and modifications, which explains the relationship between Chapter 108 (liscensing) and 113 (growth offset).

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Chapter 100 DEFINITIONS REGULATION

1. Air contaminants include, but are not limited to, dust, fumes, gas, mist, particulate matter, smoke, vapor or any combination thereof.

2. Air pollution control apparatus means and includes any appliance, equipment, machinery, installation or structures which remove, control, reduce, elimate, dispose of or render less noxious the emission of air contaminants into the ambient air.

3. Ambient air means all air outside of buildings, stacks or exterior ducts.

4. Baseline concentration: The term "baseline concentration" reflects the time from which additional sources of air pollution will be counted against the available increment. It shall mean the actual ambient air quality in an area as of August 7, 1977 except that:

A. Contributions for any major emitting source subject to review for the Prevention of Significant Deterioration between January 6, 1975 and August 7, 1977 and operating on August 7, 1977 shall be subtracted from actual air quality on that date to establish baseline concentration (and shall be counted against the increment);

B. Contributions for any major emitting source not subject to review for the Prevention of Significant Deterioration and receiving approval to construct before January 6, 1975, but not in operation by August 7, 1977 shall be added to actual August 7, 1977 ambient air quality to establish the baseline concentration (and not counted against the increment).

Contributions for all air contaminants sources beginning operation after August 7, 1977 shall be counted against the increment except as provided in (B) above.

5. Best practicable treatment means that method which controls or reduces emissions of air contaminants to the lowest possible level considering:

A. The then existing state of technology;

B. The effectiveness of available alternatives for reducing emissions from the source being considered;

C. The economic feasibility for the type of establishment involved.

6. Board means the Board of Environmental Protection.

7. Bulk Gasoline Terminal - Bulk Terminal means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has a daily average throughput of more than 76,000 liters (20,000 gallons) of gasoline.

8. Commissioner means the Commissioner of the Department of Environmental Protection.

9. Emission means a release of air contaminants into ambient air.

10. Emission source means any and all sources of emissions of air contaminants, whether privately or publicly owned or operated.

11. External Floating Roof - External floating roof means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

12. Fuel burning equipment means any furnace, boiler, appartus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

13. Fugitive Dust means particulate matter composed of soil which is uncontaminated by pollutants resulting from industrial activity.

14. Fugitive Emissions means particulate matter emitted by an air pollution source other than from a stack or flue.

15. General Process source means any emission source except fuel burning equipment, incinerators, mobile sources, open burning sources and sources of fugitive dust.

16. Incinerators means any device, apparatus, equipment or structure used for destroying, reducing or salvaging by fire any material or substance.

17. Classification of Wastes

A. Type 0 - Trash, a mixture of highly combustible waste such as a paper, cardboard cartons, woodboxes and combustible floor sweepings, from commercial and industrial activities. The mixtures contain up to 10% by weight of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily rags and plastic or rubber scraps. This type of waste contains about 10% moisture and 5% incombustible solids and has a heating value of approximately 8500 B.T.U. per pound as fired.

B. Type 1 - Rubbish, mixture of combustible waste such as paper, cardboard cartons, wood scrap, foliage and combustible floor sweepings, from domestic, commercial and industrial activites. The mixture contains up to 20% by weight of restaurant or cafeteria waste, but contains little or no treated papers, plastic or rubber wastes. This type of waste contains about 25% moisture and 10% incombustible solids and has a heating value of approximately 6500 B.T.U. per pound as fired.

C. Type 2 - Refuse, consisting of an approximately even mixture of rubbish and garbage by weight. This type of waste is common to apartment and residential occupancy, consisting of up to 50% moisture, 7% incombustible solids, and a heating value of approximately 4300 B.T.U. per pound as fired.

D. Type 3 - Garbage, consisting of animal and vegetable wastes from restaurants, cafeterias, hotels, hospitals, markets and like installations. This type of waste contains up to 70% moisture, and up to 5% incombustible solids and has a heating value of approximately 2500 B.T.U. per pound as fired.

E. Type 4 - Human and animal remains, consisting of carcasses, organs and solid organic wastes from hospitals, laboratories, abattoirs, animal pounds, and similar sources, consisting of up to 85% moisture, 5% incombustible solids and having a heating value of approximately 1000 B.T.U. per pound as fired.

F. Type 5 - By-product waste, gaseous, liquid or semi-liquid such as tar, paints, solvents, sludge, fumes, etc., from industrial operations. B.T.U. values must be determined by the individual materials to be destroyed.

G. Type 6 - Solid by-product waste, such as rubber, plastics wood waste, etc., from industrial operations. B.T.U. values must be determined by the individual materials to be destroyed.

18. Classification of Incinerators

A. - Class I - Portable, packaged, completely assembled, direct fed incinerators 5 to 15 cubic feet primary chamber volume; or a burning rate of 25 to 100 pounds per hour of type 1 or type 2 waste; or a burning rate of 25 to 75 pounds per hour of type 3 waste.

B. Class IA - Portable, packaged or job assembled, direct feed incinerators with 5 to 14 cubic feet primary chamber volume; or a burning rate of 25 to 100 pounds per hour of type 1 or type 2 waste; or a burning rate of 25 to 75 pounds per hour of type 3 waste.

C. Class II - Flue-fed, single chamber incinerators with more than 2 square feet burning area, for type 2 waste. This type of incinerator is served by one vertical flue functioning both as a shute for charging waste and to carry the products of combustion to atmosphere.

This type of incinerator has been installed in apartment houses or multiple dwellings.

D. Class IIA - Chute-fed multiple chamber incinerators, for apartment buildings with more than 2 square feet burning area, suitable for type 1 or type 2 waste. (Not recommended for industrial installation) This type of incinerator is served by a vertical chute for charging wastes from two or more floors above the incinerator and a separate flue for carrying the products of combustion to the atmosphere.

E. Class III - Direct fed incinerators with a burning rate of 100 pounds per hour and over, suitable for type 3 waste.

F. Class Iv - Direct fed incinerators with a burning rate of 75 pounds per hour or over, suitable for type 3 waste.

G. Class V - Municipal incinerators suitable for type 0, type 1, type 2 or type 3 wastes, or a combination of all four wastes, and are rated in tons per 24 hours.

H. Class VI - Crematory and pathological incinerators, suitable for type 4 waste.

I. Class VII - Incinerators designed for specific by-products wastes, type 5 or type 6.

19. Internal Floating Roof - Internal floating roof means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

20. Major emitting source - The term "major emitting source" means any of the following emission sources of air contaminants which emit, or have the potential to emit, one hundred tons per year or more of any air contaminants:

A. Fossil-fuel fired steam electric plants of more than two hundred and fifty million British thermal units per hour heat input;

B. Primary zinc smelters;

C. Coal cleaning plants (thermal dryers);

D. Iron and steel mill plants;

E. Kraft pulp mills;

F. Portland cement plants;

G. Primary aluminum ore reduction plants;

H. Primary copper smelters;

I. Municipal incinerators capable of charging more than two hundred and fifty tons of refuse per day;

J. Hydrofluoric, sulfuric, and nitric acid plants;

K. Petroleum refineries:

L. Lime plants:

M. Phosphate rock processing plants;

N. Coke oven batteries;

O. Sulfur recovery plants;

P. Carbon black plants;

Q. Sintering plants;

R. Secondary metal production facilities;

S. Chemical process plants;

T. Fossil-fuel boilers of more than two hundred and fifty million British thermal units per hour heat input;

U. Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels;

V. Taconite Ore processing facilities;

W. Glass fiber processing plants;

X. Charcoal production facilities;

Y. Primary Lead Smelters;

Z. Fuel Conversion Plants;

Such term shall also include any source with the potential to emit two hundred and fifty tons per year or more of any air contaminants.

Such term shall also include any modification in such source such that the potential emissions of any regulated pollutant is increased according to the above definition.

For the purposes of regulating of new sources which seek to locate in or whose emissions may reasonably be expected to affect designated Nonattainment Areas, the term "major emitting source" shall include any source which emits or has the potential to emit one hundred tons per year or more of any air contaminants.

21. Modification means any physical change to or change in the method of operation of, an affected facility which increases the amount of any air contaminant (to which a standard applies) emitted by such facility or which results in the emission of any air contaminant (to which a standard applies) not previously emitted, except that:

A. Routine maintenance, repair, and replacement shall not be considered physical changes and

B. The following shall not be considered a change in the method of operation:

1. An increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility;

2. An increase in hours of operation;

3. Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to such facility, the affected facility is designed to accomodate such alternative use.

22. Opacity means the degree of light obscuring capacility of non black emissions of visible air contaminants expressed as a percentage. (For example complete opacity shall be expressed as 100 percent)

23. Open burning means the burning of any type of combustible material in the open ambient air without being eompletely enclosed, and where the products of combustion are emitted directly into the ambient air without passing through a stack, chimney or duct.

24. Person means any individual, partnership, corporation, whether private, public or quasi-municipal, municipality, state governmental agency or other legal entity.

25. Petroleum Liquids - Petroleum liquids means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

26. Potential emissions - The term "potential emissions" means those emissions expected to occur without air pollution control equipment.

Annual potential emissions shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the operating rate and/or hours of operation. Other enforceable permit conditions on the type or amount of materials combusted or processed will also be used in determining the potential emission rate of a source.

27. Process weight rate means the average total weight of all materials, not including any gaseous or liquid fuels or combustion air, introducted into any manufacturing, industrial or combustion process that may result in the emission of particulate matter to the ambient air, computed on an hourly basis, and shall be expressed in terms of weight per unit of time.

28. Region means those air quality regions established by the Department of Environmental Protection pursuant to 38 M.R.S.A., Section 583.

29. Ringelmann Chart shall mean the chart published and described in the U. S. Bureau of Mines Information Circular 8333, on which are illustrated graduated shades of gray for use in estimating the light obscuring density or deice for the measurement of the light obscuring density of black air contaminant emissions which may be approved by the Department of Environmental Protection.

30. True Vapor Pressure - True vapor pressure means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517 "Evaporation Loss from Floating Roof Tanks," 1962.

31. Significant Impact - Significant impact shall mean the contribution for all air contaminants which is equal to or greater than, or may reasonably be expected to be equal to or greater than the levels shown below for the respective averaging times:

		Averaging Time			
Pollutant	Annual	24-Hr	8-Hr	3-Hr	1-Hr
SO_2	1 ug/m^3	5 ug/m^3		25 ug/m^3	
TSP	1 ug/m^3	5 ug/m^3			
NO_2	1 ug/m^3				
CO			0.5 mg/m^3		

32. Lesser Source - Lesser source means any fuel burning equipment, burning fuel oils, or combination of such equipment at one location, that has a total heat input capacity of 50×10^6 BTU/hr or less, and uses less than 500,000 gallons of oil annually.

§598. Visible emissions†

1. Scope. This section shall be effective in all ambient air quality regions in the State of Maine as follows:

(a) Immediately for all emission sources, the construction which begins after January 31, 1972;

(b) October 1, 1973 for all existing sources.

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† Sections 598 through 604, which were approved by EPA on 9/20/74, represent the statutized and enforceable version of DEP Regulations 100.1 through 100.7.

2. Prohibition. No person shall emit or cause to be emitted any visible air contaminants from any emission source that exceeds a number 2 on the Ringelmann Chart or an opacity of 40% except for periods of not exceeding 5 minutes in any one hour or 15 minutes in any continuous 3-hour period.

3. Exemptions. This section shall not apply to emissions of water vapor, incinerators, air contaminants emitted for the purpose of research training or recreation and so certified by the board and permitted open burning. Existing general process sources which are otherwise granted a longer period of time to comply with section 602 shall be exempt from this section until such time as such standard becomes applicable.

§ 599. Open burning

1. Prohibitions.

(a) Open burning of tires or rubber products or by-products is prohibited after July 1, 1972;

(b) Except as provided in subsection 2, open burning of waste of any kind is prohibited after July 1, 1975.

2. Exemptions. Open burning may be permitted for the following purposes provided a permit is obtained pursuant to subsection 3:

(a) Open burning for the control or prevention of any disease, virus or similar hazard to public health;

(b) Open burning for agricultural purposes such as land clearing, blueberry control or burning for similar prescribed cultural purposes.

(c) Open burning for the disposal of any material generated by the demolition of any building or the clearing of any land for the erection, modification, maintenance or construction of any highway, railroad, power or communication line or pipeline, or commercial or industrial or recreational building or development;

(d) Open burning for training, research and recreational purposes provided that fires for recreational purposes on a person's own property do not require a permit.

3. Open burning permits. Open burning permits may be granted by the forest ranger or town forest fire warden having jurisdiction over the location where the fire is to be set. Should complicated circumstances warrant, the ranger or warden may refer the person requesting such a permit to the commissioner for approval of paragraph (a), (b), and (c). Such permits will be issued if it is determined:

(a) There is no local, private or municipal waste collection for such materials nor any reasonably located municipal or private solid waste disposal facility to which such material may be transported or the quantity of material is such that it cannot be reasonably transported;

(b) There is no other reasonable method for disposal of such materials that will not create or aggravate a hazard to public health or safety or public or private property nor violate any provision of state or local law or regulation;

(c) The existing wind speed and atmospheric stagnating conditions will not create any nuisance conditions;

(d) Such burning will not take place within 25 feet of a public way;

(e) Such burning will take place under such conditions as will prevent the uncontrolled spread of the fire;

(f) The burning will comply with all applicable regulations of the State of Maine Forestry Department and any applicable local fire regulations.

4. Reports. The progress reports listed in this subsection shall be submitted to the board on or before the date indicated by any person using open burning as a method of waste disposal:

(a) November 1, 1973: Status report on forms supplied by the department;

(b) April 15, 1974: A status report on forms supplied by the department indicating that the necessary studies and investigations and preparation of final plans is progressing to insure compliance with paragraph (c).

Such a report should include, but is not limited to, location and method of waste disposal for which final plans are being prepared and name of in-house or contracted person responsible for the preparation of such plans;

(c) October 1, 1974: Final plans for proposed waste disposal facilities including detailed engineering plans and necessary site acquisition, said final plans to be subject to board review and approval under applicable laws and regulations;

(d) April 15, 1975: Copies of executed contracts or agreements necessary to implement the approved final plans including acquisition of land and acquisition, installation and construction of structures and equipment;

(e) July 1, 1975: Certification of Compliance.

§ 600. Fuel-burning equipment particulate emission standard†

1. Scope. This section shall be applicable to all fuel-burning equipment that is fired at a rate of 3 million B.T.U. per hour or greater, regardless of fuel type, and shall be effective in all ambient air quality control regions in the State of Maine as follows:

† Fuel burning sources of 3 to 10 million BTU/hr maximum heat input are not considered a part of the Maine SIP.

(a) Immediately for all fuel-burning equipment, the construction or operation of which begins after January 31, 1972;

(b) June 1, 1975 for all existing sources.

2. Emission standard. Any person operating fuel-burning equipment within the scope of this section shall limit the particulate emissions from such fuel-burning equipment in accordance with Figure A during any continuous 2-hour period.

3. Test methods and procedures. Test methods 1 and 5 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulation 60.85 published in the Federal Register, volume 36, number 247, December 23, 1971, or such other methods as are deemed equivalent by the board shall be those used to determine compliance with this section.

§ 601. Incinerator particulate emission standard

1. Scope. This section shall be applicable to all incinerators and shall be effective in all regions in the State of Maine as follows:

(a) Immediately for all incinerators, the construction or operation of which begins after January 31, 1972;

(b) June 1, 1975 for all existing incinerators.

2. Emission standard. No person shall emit or cause to be emitted any particulate air contaminants from:

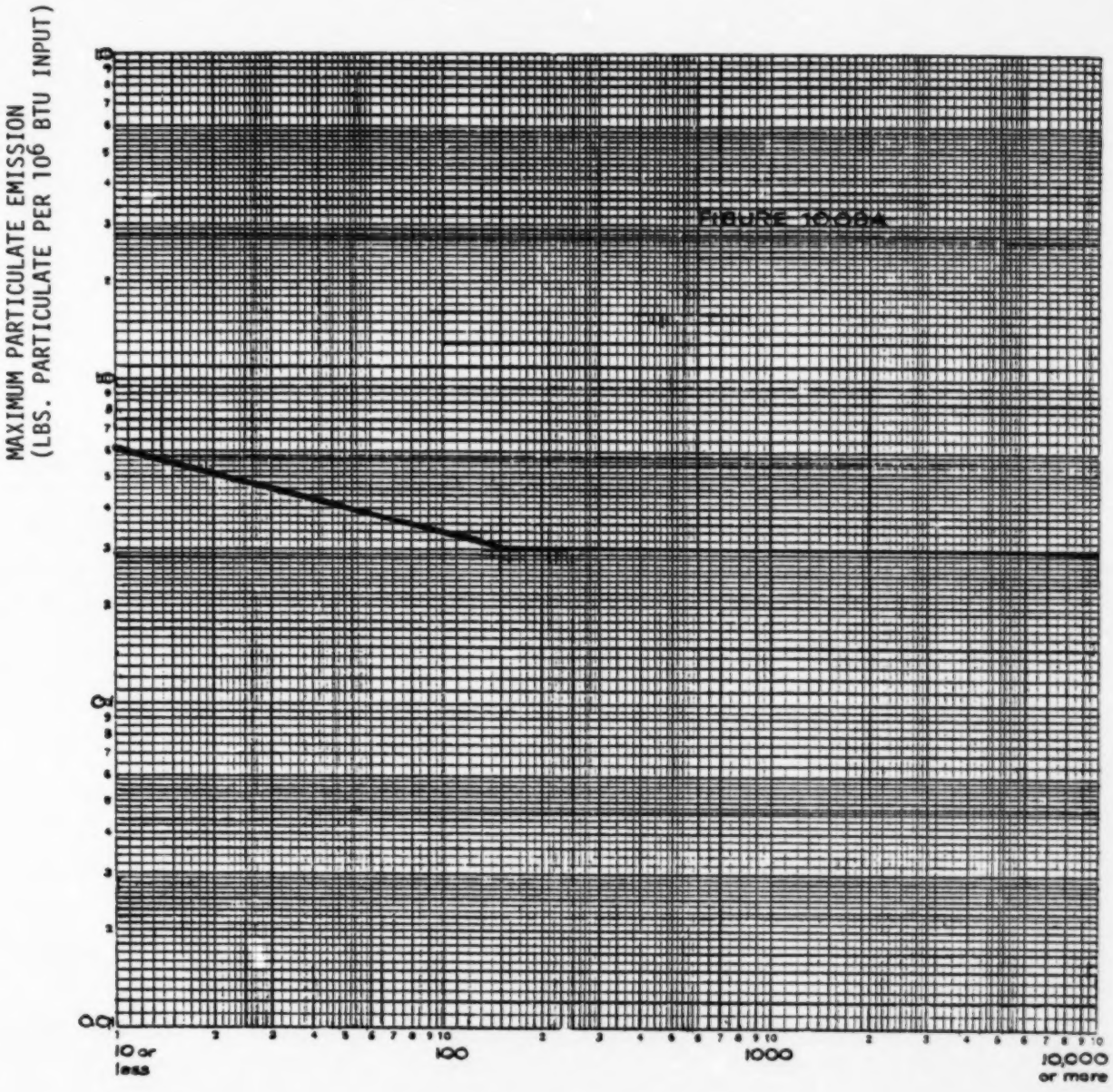
(a) Any incinerator, darker than a number 1 on the Ringlemann Chart, excluding the emission of water vapor;

(b) Any class III, IV, V, VI and VII incinerator having a designed charging rate of 50 tons per day or less, that exceed 0.2 grain per standard cubic foot of dry flue gas during any continuous 2-hour period, corrected to 12% carbon dioxide without the contribution of carbon dioxide from the auxiliary fuel;

(c) Any class incinerator having a designed charging rate greater than 50 tons per day, that exceed 0.08 grain per standard cubic foot of dry flue gas during any continuous 2-hour period, corrected to 12% carbon dioxide without the contribution of carbon dioxide from the auxiliary fuel.

3. Test methods and procedures. Test methods 1, 3 and 5 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulation 60.85 published in the Federal Register, volume 36, number 247, December 23, 1971 or such other methods as are deemed equivalent by the board shall be those used to determine compliance with this section.

FIGURE A


MAXIMUM PARTICULATE EMISSION
(LBS. PARTICULATE PER 10⁶ BTU INPUT)
10 or less
100
1000
10,000 or more
EQUIPMENT CAPACITY RATING
(10⁶ BTU/HR INPUT)

§ 602. General process source particulate emissions

1. Scope. This emission standard shall be effective in all regions in the State of Maine as follows:

(a) Immediately for any process source the construction or operation of which begins after January 31, 1972;

(b) June 1, 1975 for any existing general process source.

2. Kraft pulping processes. Any person operating any kraft pulping process shall limit the emission of particulate air contaminants from such emission source as follows:

Four pounds of particulate emissions per air dried ton of kraft pulp from the recovery boiler; one pound of particulate air contaminants per air dried ton of kraft pulp from the lime kiln; 0.5 pound of particulate air contaminants per air dried ton of kraft pulp from the smelt tank during any continuous 2-hour period.

3. Other processes. Any person operating any general process sources, except kraft pulping processes, shall limit the emission of particulate air contaminants from such source according to the following table:

TABLE 1

Process Weight Rate (lbs./hr.)	Emission Rate (lbs./hr.)
50	0.36
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

Interpolation of Table 1 for process weight rates up to 60,000 lbs./hr. shall be computed by use of the following equation:

$$E = 3.59P^{0.62} \qquad P \leq 30 \text{ tons/hr.}$$

and interpolation and extrapolation of Table 1 for rates in excess of 60,000 lbs./hr. shall be computed by use of the equation:

$$E = 17.31P^{0.16} \qquad P > 30 \text{ tons/hr.}$$

Where E=emissions in pounds per hour and P=process weight rate in tons per hour.

All emissions from all general process sources operated by the same person in the same general location shall be combined in computing the process weight rate.

4. Test methods and procedures. Test methods 1 and 5 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulation 60.85 published in the Federal Register, volume 36, number 247, December 23, 1971 or such other methods as are deemed equivalent by the board shall be used to determine compliance with this regulation.

§ 603. Low sulfur fuel emission

1. Prohibitions. In the Metropolitan Portland Air Quality Control Region, no person shall sell, distribute, buy or use any fuel with a sulfur content greater than 1.50% during the following periods:

(a) November 1, 1973 to April 30, 1974;

(b) Any time after November 1, 1974.

In the Central Maine, Downeast, Aroostook County and Northwest Maine Air Quality Control regions, no person shall sell, distribute, buy or use any fuel with a sulfur content greater than 2.5% any time after November 1, 1973.

2. Records. Any person importing or shipping residual oil or coal into the Metropolitan Portland Air Quality Control Region shall maintain a record of the sulfur content of such fuel for a period of 3 years.

3. Exemption. This section shall not apply to any emission source which through use of sulfur dioxide collecting devices or other equipment reduces the emission of sulfur dioxide to the equivalent of burning such fuel with a sulfur content of 1.50%.

§ 604. Sulfur dioxide emission standard for sulfite pulping processes

1. Scope. The emission standard shall apply to all emissions of sulfur dioxide from sulfite pulping processes except sulphur dioxide produced from the burning of coal or petroleum fuels. This emission standard shall become effective in all regions as follows:

(a) Immediately for any sulfite pulping process, the construction or operation of which begins after January 31, 1972:

(b) June 1, 1975 for all existing sources.

2. Emission standard. No person shall emit or cause to be emitted any sulfur dioxide emissions from any emission source within the scope of this emission standard in excess of 40 pounds per air dried ton of sulfite pulp produced.

3. Test methods and procedures. Test methods 1 and 6 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulations 60.85 as published in the Federal Register, volume 36, number 247, December 23, 1971, or such other methods as deemed equivalent by the board shall be used to determine compliance with this regulation.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Chapter 108 EMISSION LICENSE REGULATION

1. Scope

This regulation shall be effective in all ambient air quality control regions in the State of Maine.

2. Emission License

Any person operating an existing emission source which is not exempted under Section 10 shall file an application for an Emission License with the Department.

Any person planning to operate a new emission source not exempted under Section 10 or modify either an exempt existing source or licensed source such that following construction or modification the source would require an emission license under this regulation, shall submit an application for an Emission License at least 180 days prior to starting construction.

3. Information and Impact Analysis Required

In addition to the application data required of any source for an air emission license, a new or modified major emitting source shall provide sufficient information so as to demonstrate that proposed increases in emissions, in conjunction with existing emissions from other sources, will not cause or contribute to a violation of applicable state ambient air quality standards and ambient air increments, except insofar as allowed under Section 5.

A. All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data bases and other requirements specified in the Guidelines on Air Quality Models promulgated by the U. S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711.

1. Where an air quality impact model specified in the Guidelines on Air Quality Models is inappropriate, the model may be modified or another model substituted.

2. A substitution or modification of a model shall be subject to public comment procedures.

3. Written approval of the Commissioner of DEP must be obtained for any modification or substitution.

4. Methods like those outlined in the Workbook for the Comparison of Air Quality Models (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1977) will be used to determine the comparability of air quality models.

5. Monitoring done by the owner or operator, if requested by the Department pursuant to subsection (c)(i), shall conform to the requirements of Appendix B to Part 58, Title 40, Code of Federal Regulations. Modification to these procedures are permitted only after written approval by the Commissioner.

B. The following application data is required of any proposed new or modified major emitting source:

1. A description of the nature, location, design capacity and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout.

2. A schedule for construction of the source or modification.

3. A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates and any other information necessary to determine that Best Available Control Technology or Lowest Achievable Emission Rate as applicable would be applied.

C. The following additional data will be required of those new or modified emission sources whose emissions may have significant impact on ambient air quality standards and applicable increments, or will impact a Class I area or will impact an area in which an applicable increment is known to be violated:

1. An analysis of continuous air quality monitoring data for any pollutant emitted by the source or modification for which a State ambient air quality standard exists, except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the Department's satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of a national ambient air

quality standard.

2. An analysis of the air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact.

3. An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

4. An analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

D. The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring as the Department determines may be necessary to establish the effect which emissions from the source or modification of a pollutant for which an ambient air quality standard exists (other than non-methane hydrocarbons) may have or is having, on air quality in any area which such emissions would affect.

E. Sections 1, 2, 3, and 4 of subpart C shall not apply to a major emitting source or modification except for those sources whose emissions will or can reasonably be expected to impact a Class I area.

1. With respect to emissions from it which the owner or operator shows to be fugitive dust, or

2. Whose allowable emissions of such pollutant would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

4. Criteria for Granting the License

Issuance of licenses shall be governed by 38 M.R.S.A. 590. Within 180 days of receipt of a properly completed application for emission license, the Department must either grant or deny the license. The burden shall be upon the person requesting the emission license to affirmatively demonstrate to the Department that each of the following criteria have been met:

A. the emission is receiving the best practical treatment as defined in Section 6.

B. the emission will not violate applicable emission standards or can be controlled so as to not violate the applicable emission standards ad defined in DEP regulations.

C. The emission either alone or in conjunction with existing emissions will not violate applicable ambient air quality standards and increments as defined in 38 M.R.S.A. 584-A and DEP regulations.

D. The equipment to be used is both reliable in conforming to design specifications and expected operating characteristics, and dependable in performance, except that allowances will be made for innovative technology.

5. License for Sources in or Affecting Nonattainment Areas

A. In addition to the criteria listed in Section 4, no license for a new or modified major emitting source located in or significantly impacting a nonattainment area shall be granted unless:

1. The source demonstrates to the Department that it has obtained offsets consistant with the requirements of DEP Regulation, Chapter 113; and

2. All major emitting sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in the state are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards.

B. It shall be the responsibility of the proposed new or modified major emitting source subject to subsection A to insure the required offset. All such emission reductions or offsets must be legally enforceable prior to obtaining an air emission license and in effect by startup and throughout operation of the proposed source.

C. Licenses for existing sources located in or significantly impacting a nonattainment area shall not be reissued unless the Board determines that:

1. There is in effect a State Implementation Plan program to achieve the applicable ambient air quality standard for the nonattainment area;

2. Reasonable Further Progress toward achievement of the standard is being made in accordance with the State Implementation Plan schedule; and

3. The source seeking renewal of its license is in compliance with any obligations it may have to achieve the applicable standard in the nonattainment area.

6. Definition of Best Practicable Treatment

A. Existing Sources. For all sources which obtained an original air emission license for a new, modified, or existing facility prior to January 6, 1975, "Best Practicable Treatment" shall mean:

1. That method which controls or reduces emissions of air contaminants to the lowest possible level considering:

a. the then existing state of technology, and
b. the effectiveness of available alternatives for reducing emissions from the source being considered, and
c. the economic feasibility for the type of establishment involved.

2. Reasonably available control technology for those sources located within or whose emissions significantly impact a designated nonattainment area. Reasonably Available Control Technology means that method of treatment that is reasonably available as a retrofit to existing processes or equipment involved and shall be determined by the Department considering the then existing state of technology, federal guidelines for determining the degree of emission reductions achievable and the type and unique character of affected facilities.

3. In no case shall "Best Practicable Treatment" mean less than:

a. that method of air pollution control which assures the attainment and maintenance of all applicable emission standards promulgated by the Department and in force at the time of the issuance of the original or renewed air emission license; or

b. where applicable, that method of air pollution control which assures the attainment and maintenance of New Source Performance Standards, as promulgated by the U. S. Environmental Protection Agency at 40 CFR Part 60 under authority of Section 111 of the Clean Air Act; or

c. where applicable, that method of air pollution control which assures the attainment and maintenance of the National Emission Standards for Hazardous Air Pollutants as promulgated by the U. S. Environmental Protection Agency at 40 CFR Part 61, under authority of Section 112 of the Clean Air Act.

B. New Sources in Attainment Areas

1. For any new or modified major emitting source which submits a license application after January 1, 1979 "Best Practicable Treatment" shall mean "Best Control Technology" (BACT). "Best Available Control Technology" means an emission limitation based on the maximum degree of reduction of each pollutant emitted from or which results from the new or modified source, which the Board, on a case by case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such source through application of production processes and available methods, systems, techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "Best Available Control Technology" result in emissions of any pollutant which exceed those allowed by any applicable standard established pursuant to section 111 (New Source Performance Standards) or section 112 (National Emission Standards for Hazardous Pollutants) of the U. S. Clean Air Act, as amended, or any applicable emission standard established by the Department.

The Board will consider the imposition of a design, equipment or operating standard or work practice if the imposition of emission limitations proves not to be possible.

2. The Board views the BACT requirement as the major means by which the use of the available ambient air increment is regulated. BACT as defined in Section 6 (B)(1) will generally minimize the use of the increment so as to maximize local future growth options.

3. The BACT determination will be on a case-by-case basis. The degree of analysis required of the applicant will vary with the level of air quality impact expected to be contributed by the source. In every case, however, the applicant is responsible for the submission of the following information to the degree necessary (as determined by the Department) to make the BACT determination:

a. Proposal of a Control System Representing BACT. BACT should consider control of each emission point at a facility, including fugitive as well as stack emissions. Technology selection should consider application of flue gas treatment, fuel treatment and processes and techniques which are inherently low polluting and are economically feasible to this source. In cases where technological or economic limitations on the application of measurement techniques would make the imposition of an emission

standard infeasible, a design, operating, or equipment standard or work practice can be established.

b. Presentation of all Alternative Systems Considered that Could Achieve a Higher Degree of Emission Control. Only technically viable alternatives which have greater control capabilities than the system proposed as BACT and which have been used for the same or similar applications should be considered. However, the Board recognizes that the BACT decision may require a trade-off of control among pollutants and sources. If no better control alternative is technically and economically feasible for an emission point, then such finding should be stated and supported. In some cases, a better control technology may be available for a general type of operation; however, unique processing equipment or procedures may create a valid technical reason which would preclude its use. Such situations should be fully supported.

c. For Alternative Systems Not Selected. A source must explain why the more stringent level of control is inappropriate for BACT in terms of energy, economic and environmental impacts. The rationale should be presented in the form of a incremental analysis of the impacts of each rejected alternative relative to the proposed BACT system.

4. The impact analysis which compares the preferred BACT decision with alternatives not chosen will vary in number of variables and the depth in which they are presented depending on the size, location, and air quality impact of the proposed source. While the following list of factors to be considered in the environmental, energy and economic impacts analysis is not all-inclusive, a typical BACT determination for a complex source may involve the following.

a. Energy Impacts: Direct Energy Impacts; Impact on Scarce Fuels; Energy Production Impacts (electric utilities).

b. Environmental Impact (direct and secondary): Air Pollution; Water Pollution; Solid Waste Disposal; Irreversible and Irretrievable Commitment of Resources; Other, as appropriate.

5. The Department urges the use of already available documents and studies, however, the impact analysis must be supported by documentation.

6. The Department will not automatically assign relative weights to these impact factors. The peculiar nature of the source, its proposed location and the views of the public and local officials may vary the approach taken by the Board.

C. New Sources in Nonattainment Areas. For any new or modified major emitting source which submits a license application to locate in or whose emissions may reasonably be expected to impact any designated Nonattainment Area, "Best Practicable Treatment" shall mean "Lowest Achievable Emission Rate" for those pollutants emitted by the facility which are the cause of the nonattainment designation for that area.

"Lowest Achievable Emission Rate" means for any source that rate of emissions which reflect:

1. The most stringent emission limitation which is contained in any implementation plan of any state (required under the Clean Air Act, as amended, 42 U.S.C. 1857, et. seq.) for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or

2. The most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event shall "Lowest Achievable Emission Rate" result in the emission of any pollutant in excess of those standards and limitations promulgated pursuant to Sections 111 or 112 of the Clean Air Act, as amended, or any emission standard established by the Department.

D. Stack Height. The degree of emission limitation required for control of any air contaminant under this section shall not be affected in any manner by:

1. So much of the stack height of the source as exceeds good engineering practice; or

2. Any other dispersion technique.

7. Conditions on the License.

The Department may impose any appropriate and reasonable conditions to insure compliance with emission and ambient air quality standards, regulations and orders. However, every license shall be subject to the following standard conditions:

A. Employees and authorized representatives of the Department of Environmental Protection shall be allowed access to the premises of the licensee during normal business or operating hours, and at such other times as the Commissioner of the Department of Environmental Protection deems necessary, to perform such tests and inspections and examine all records relating to emissions.

B. A new emission license shall be required prior to the commencement of a modification.

C. All applicable ambient air quality standards, emission standards, regulations, orders and local ordinances shall be complied with.

D. The licensee shall maintain sufficient records to accurately complete the application for an emission license.

E. The licensee shall maintain records of all required air pollution control equipment malfunctions, failures, and downtime as well as records of any change or malfunction of the air contaminant sources that would create above normal contaminant emissions.

F. Approval to construct shall become invalid if construction is not commenced within 24 months after receipt of such approval or if construction is discontinued for a period of 24 months or more. The Department may extend such time period upon a satisfactory showing that an extension is justified.

In addition to the standard conditions imposed on any license, the Board may impose any other appropriate and reasonable conditions necessary to insure compliance with emission standards and regulations.

8. Determination of Adverse Impact on Nearby Regions

The Department shall have the authority to make a preliminary determination upon submission of the application for the new or modified major emitting source whether such source is likely to have an adverse impact on the air quality standards of a nearby Region or portion thereof. If such determination is in the affirmative, the proposed new or modified source shall be requested, in writing, to demonstrate that its emissions will not cause or contribute to a violation of the applicable standards of any nearby Region or portion thereof. Any interested person may petition the Department for a

determination under this Section with respect to any license application within the time period allowed for public comment.

9. Terms of the Emission License

All emission licenses except those classified in Regulations, Chapter 100 as lesser sources shall be issued for a two year period and renewed biennially from the date that they were initially granted. Lesser source licenses may be granted and renewed for five year periods. Obtaining an air emission license does not relieve the source from complying with all applicable emission standards and ambient air quality standards. Sources classified as "lesser sources" shall be so licensed as current licenses expire except that any such sources licensed after January 1, 1978 shall be automatically placed in this category.

10. Exemptions

The following sources are exempted from obtaining an Emission License as required in Section 108.2:

A. Fuel burning equipment whose total heat input is less than 10 million BTU per hour;

B. Incinerators of Class I and IA;

C. Moving sources;

D. Bulk gasoline terminals with a daily throughput of less than 20,000 gallons;

E. Bulk Petroleum Storage Facilities having gasoline or crude oil stored in tanks smaller than 39,000 gallons.

11. Prohibition

No person shall emit or cause to be emitted any air contaminant from any emission source without a license from the Department after January 1, 1973.

12. Confidential and Proprietary Information

All process, product and other information designated proprietary by the applicant, but not the emissions information, submitted in an application for an emission license shall be considered confidential and not for public disclosure.

These regulations shall be effective upon filing with the Office of the Secretary of State and shall supersede all previous regulations on this subject.

CHAPTER 109 EMERGENCY EPISODE REGULATION

1. Scope

This regulation shall apply in any region in which the ambient air quality reaches those levels defined in Section 100.9.2.

2. Criteria

Forecast: The forecast level will be declared upon receipt of an air stagnation advisory.

Alert: The Alert level is that concentration of pollutants at which first stage control actions is to begin. An Alert will be declared when any one of the following levels is reached at any monitoring site:

SO_2--800 ug/m^3 (0.3 p.p.m.), 24-hour average.

Particulate--3.0 COHs or 375 ug/m^3, 24-hour average. SO_2 and particulate combined--product of SO_2 p.p.m., 24-hour average, and COHs equal to 0.2 or product of SO_2--ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average equal to 65 x 10^3.

CO--17 mg/m (15 p.p.m.), 8-hour average.

Oxidant (O_3)--200 ug/m^3 (0.1 p.p.m.)--1-hour average. NO_2--1130 ug/m^3 (0.6 p.p.m.), 1-hour average, 282 ug/m^3 (0.15 p.p.m.), 24-hour average.

and meteorological conditions are such the pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken.

Warning: The warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of site:

SO_2-1,600ug/m^3 (0.6 p.p.m.), 24-hour average.

Particulate-5.0 COHs or 625ug/m^3, 24-hour average.

SO_2 and particulate combined--product of SO_2 p.p.m., 24-hour average and COHs equal to 0.8 or product of SO_2 ug/m^3, 24-hour average equal to 261 x 10^3.

CO-34 mg/m^3 (30 p.p.m.), 8-hour average.

Oxidant (O_3)-800 ug/m^3 (0.4 p.p.m.), 1-hour average.

NO_2-2,269ug/m^3 (1.2 p.p.m.)-1-hour average; 565ug/m^3 (0.3 p.p.m.), 24-hour average.

and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken.

Emergency: The emergency level indicates that air quality is continuing to degrade toward a level of significant harm to the health of persons and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site:

SO_2-2100 ug/m^3 (0.8 p.p.m.), 24-hour average.

Particulate-7.0 COHs or 875 ug/m^3, 24-hour average.

SO_2 and particulate combined--product of SO_2 p.p.m. 24-hour average and COHs equal to 1.2 or product of SO_2ug/m^3, 24-hour average and particulate ug/m^3, 24-hour average equal to 393 x 10^3.

CO - 46 mg/m^3 (40 p.p.m.), 8-hour average Oxidant (O_3) - 1200 ug/m^3 (0.6 p.p.m.), 1-hour average.

NO_2-3,000ug/m^3 (1.6 p.p.m.), 1-hour average; 750 ug/m^3 (0.4 p.p.m.), 24-hour average.

and meteorological conditions are such that this condition can be expected to remain at the above levels for twelve (12) or more hours.

3. Emission Reduction During Episodes

There is no specific emission reduction required during the forecast stage, however, the Department will monitor the atmospheric concentrations of the various pollutants and the prevailing meteorology on a 24-hour basis.

The following emission reduction plan shall be instituted in any region that the alert level has been reached.

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.

3. Persons operating fuel-burning equipment shall make maximum use of mid-day (12-noon - 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

4. Persons operating motor vehicles should eliminate all unnecessary operations.

Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert Level.

Source of air pollution	Control action
1. Coal or oil-fired electric power generating facilities.	a. Substantial reduction by utilization of fuels having low ash and sulfur content.
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
	c. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.
2. Coal and oil-fired process steam generating facilities.	a. Substantial reduction by utilization of fuels having low ash and sulfur content.
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
	c. Substantial reduction of steam load demands consistent with continuing plant operations.
3. Manufacturing industries of the following classifications: Primary Metals Industries Petroleum Refining Operation Chemical Industries Mineral Processing Indust. Paper and Allied Products Grain Industry.	a. Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing or deferring production and all operations.
	b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gas vapors or malodorous substances.
	c. Maximum reduction of heat load demands for processing.
	d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

The following emission reduction plan shall be instituted in any region that the warning level has been reached.

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.

3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

4. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level.

Source of air pollution	Control action
1. Coal or oil-fired electric power generating facilities.	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content.
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
	c. Maximum reduction by diverting electric power generation to facilities outside of Warning Area.
2. Oil and oil-fired process steam generating facilities.	a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content.
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
	c. Making ready for use a plan of action to be taken if an emergency develops.

3. Manufacturing industries which require considerable lead time for shut-down including the following classifications. Petroleum Refining Chemical Industries Primary Metals Industries Glass Industries Paper and Allied Products.	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary assuming reasonable economic hardships by postponing production and allied operation. b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances. c. Maximum reduction of heat load demands for processing. d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
4. Manufacturing industries require relatively short lead times for shut-down including the following classifications. Primary Metals Industries Chemical Industries Mineral Processing Industries Grain Industry.	a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances. c. Maximum reduction of heat load demands for processing. d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

The following emission reduction plan shall be instituted in any region that the emergency level has been reached.

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.

3. All places of employment described below shall immediately cease operations causing emissions of air contaminants.

   a. Mining and quarrying of nonmetallic minerals.

   b. All construction work except that which must proceed to avoid emergent physical harm.

   c. All manufacturing establishments except those required to have in force an air pollution emergency plan.

   d. All wholesale trade establishments; i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.

   e. All offices of local, county and State government including authorities, joint meetings, and other public bodies excepting such agencies which are determined by the chief administrative officer of local, county, or state government, authorities, joint meetings and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this order.

   f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.

   g. Banks, credit agencies other than banks, securities and commodity brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices.

   h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments, photographic studios; beauty shops, barber shops, shoe repair shops.

   i. Advertising offices, consumer credit reporting, adjustment collection agencies, duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services, equipment rental services, commercial testing laboratories.

   j. Automobile repair, automobile services, garages.

   k. Establishment rendering amusement and recreational services including motion picture theaters.

   l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.

4. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.

5. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

Source Curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level.

Source of air pollution	Control action
1. Coal or oil-fired electric power generating facilities.	a. Maximum reduction by utilization of fuels having lowest ash and sulfur content.
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
	c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
2. Coal and oil-fired process steam generating facilities.	a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.
	b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
	c. Taking the action called for in the emergency plan.
3. Manufacturing industries of the following classifications. Primary Metals Industries Petroleum Refining Chemical Industries Mineral Processing Industries Grain Industry Paper and Allied Products.	a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury or damage to equipment.

b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances.

c. Maximum reduction of heat load demands for processing.

d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

In addition as a condition to their license, each source emitting more than 100 tons per year of any pollutant shall submit an acceptable contingency plan specific for its operation.

4. Notification of Malfunction or Breakdown

Any person operating equipment that is permitted to operate during an emergency episode, that malfunctions or breaks down causing any emission standard, regulation or standby emergency episode to the violated, shall notify the Department of Environmental Protection within 4 hours by telephone.

5. Additional Orders

In addition to the emission reduction and source curtailments required above, the Board may, pursuant to 38 M.R.S.A., Section 593, issue such additional emergency orders as it deems necessary.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Chapter 110 AMBIENT AIR QUALITY STANDARDS

1. Scope

A. These standards are applicable in all ambient air quality control regions of the State of Maine.

B. All ambient air quality standards are expressed at 25 degrees centigrads and 760 millimeters of mercury pressur.

2. Particulate Matter Ambient Air Quality Standard

A. The maximum 24 hour particulate matter concentration at any location shall not exceed 150 micrograms per cubic meter.

B. The annual geometric mean of the 24 hour particulate matter concentrations at any location shall not exceed 60 micrograms per cubic meter.

3. Sulfur Dioxide Ambient Air Quality Standards

A. The maximum 3 hour average sulfur dioxide concentration at any location shall not exceed 1150 micrograms per cubic meter.

B. The maximum 24 hour average sulfur dioxide concentration at any location shall not exceed 230 micrograms per cubic meter.

C. The annual arithmetic mean of the 24 hour average sulfur dioxide concentrations at any location shall not exceed 57 micrograms per cubic meter.

4. Carbon Monoxide Ambient Air Quality Standards

A. The maximum carbon monoxide concentration for any 8 hour period at any location shall be 10 milligrams per cubic meter, which

standard may be exceeded once per year.

5. Photochemical Oxidant Ambient Air Quality Standard

A. The maximum photochemical oxidant concentration for any 1 hour period at any location shall be 160 micrograms per cubic meter, which standard may be exceeded once per year.

6. Hydrocarbon Ambient Air Quality Standard

A. The maximum hydrocarbon concentration for any 3 hour period at any location shall be 160 micrograms per cubic meter, which standard may be exceeded once per year.

7. Nitrogen Dioxide Ambient Air Quality Standard

A. The annual arithmetic mean of the 24 hour average nitrogen dioxide concentration at any location shall not exceed 100 micrograms per cubic meter.

8. Reserved

9. Reserved

10. Establishment of Ambient Increments

A. In addition to the ambient air quality standards adopted by the Board and enacted as 38 M.R.S.A. 584-A, any Class I Region or part thereof within the State (including those federal lands designated by the Clean Air Act Amendments of 1977 shall be subject to a maximum allowable increase in concentration of sulfur dioxide and particulate matter over the baseline concentration of such pollutant, which increase shall not be exceeded more than once annually.

Such maximum allowable increase shall consist of:

1. Particulate Matter.

a. An increase in the annual geometric mean at any location shall not exceed 5 micrograms per cubic meter.

b. An increase in concentration for an 24-hour period at any location shall not exceed 10 micrograms per cubic meter.

2. Sulfur Dioxide

a. An increase in the annual arithmetic mean at any location shall not exceed 2 micrograms per cubic meter.

b. An increase in concentration for any 24-hour period at any location shall not exceed 5 micrograms per cubic meter.

c. An increase in concentration for any three-hour period at any location shall not exceed 25 micrograms per cubic meter.

B. In addition to the ambient air quality standards adopted by the Board and enacted as 38 M.R.S.A. 584-A, any Class II region or part thereof within the State shall be subject to a maximum allowable increase in concentration of particulate matter and sulfur dioxide over the baseline concentration of such pollutant, which increase shall not be exceeded more than once annually. Such masimum allowable increase shall consist of:

1. Particulate Matter.

a. An increase in the annual geometric mean at any location shall not exceed 19 micrograms per cubic meter.

b. An increase in concentration for any 24-hour period at any location shall not exceed 37 micrograms per cubic meter.

2. Sulfur dioxide.

a. An increase in the annual arithmetic mean at any location shall not exceed 20 micrograms per cubic meter.

b. An increase in concentration for any 24-hour period at any location shall not exceed 91 micrograms per cubic meter.

c. An increase in concentration for any three-hour period at any location shall not exceed 512 micrograms per cubic meter.

C. In addition to the ambient air quality standards adopted by the Board and enacted as 38 M.R.S.A. 584-A, any Class III Region or part thereof within the State shall be subject to a maximum allowable increase in concentration of particulate matter and sulfur dioxide over the baseline concentration of such pollutant, which increase shall not be exceeded more than once annually. Such maximum allowable increase shall consist of:

1. Particulate Matter.

a. An increase in the annual geometric mean at

any location shall not exceed 37 micrograms per cubic meter.

b. An increase in concentration for any 24-hour period at any location shall not exceed 75 micrograms per cubic meter.

2. Sulfur dioxide.

a. An increase in the annual arithmetic mean at an any location shall not exceed 40 micrograms per cubic meter.

b. An increase in concentration for any 24-hour period at any location shall not exceed 182 micrograms per cubic meter.

c. An increase in concentration for any three-hour period at any location shall not exceed 700 micrograms per cubic meter.

11. Exclusions From The Increment

A. Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission -- related activities; and

B. The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

These regulations shall be effective upon filing with the Office of the Secretary of State and shall supersede all previous regulations on this subject.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Chapter 113 GROWTH OFFSET REGULATION

1. Scope

This regulation applies to:

A. All new major emitting sources of particulate matter proposed for the municipalities of Bangor, Brewer, Augusta, Thomaston and Baileyville or any proposed major emitting source that will significantly affect the particulate air quality levels in any of those municipalities that make application for an air emission license after January 1, 1979.

B. All new major emitting sources of sulfur dioxide proposed for the municipality of Millinocket or any proposed major emitting source that will significantly affect the sulfur dioxide levels in that municipality that make application for an air emission license after January 1, 1979.

C. All new major emitting sources of carbon monoxide located in or significantly affecting the designated nonattainment areas for carbon monoxide in Bangor or Lewiston.

D. Any new major emitting source of any pollutant for which there is an ambient air quality standard and which emission takes place in an area where the PSD increment has been depleted, or which affects such an area.

E. Any new major emitting source that proposes to locate in or so as to significantly impact any other nonattainment area, for which there is an Implementation Plan revision in effect.

F. All new major emitting sources of volatile organic compounds in the Metropolitan Portland and Central Maine Air Quality Control Regions.

2. Prohibition

A. Except as provided in subsections (B) or (C) of this section any source covered under the scope of this regulation must, prior to obtaining an air emission license, obtain an emission reduction (offset) from existing sources whose emissions of the same pollutant affects the same area as the proposed source. The required offset shall provide that by the time the source is to commence operation, the total allowable emissions from the proposed source, from existing emissions sources and from new or modified sources which are not major sources, will be sufficiently less than existing allowable emissions so as to represent Reasonable Further Progress. Reasonable Further Progress means planned annual incremental reductions in emissions of the applicable air contaminant which are sufficient to provide for attainment of the applicable ambient air quality standard as expeditiously as practicable, but not after the attainment date required by the Federal Clean Air Act.

B. However, sources which can demonstrate by onsite monitoring data that they will be located in an area where ambient air quality standards are not being violated (i.e. clean portions of designated nonattainment areas) shall only be required to provide offsets as follows:

1. A source whose allowable emissions would not cause, or significantly contribute to, a violation of an ambient air quality standard requires no offset;

2. A source whose allowable emissions would otherwise cause a new violation of an ambient air quality standard shall obtain an air quality impact reduction (offset) sufficient to prevent the violation;

3. A source whose allowable emissions would otherwise significantly contribute to an existing violation of an ambient air quality standard shall obtain an air quality impact reduction (offset) sufficient to assure reasonable further progress toward attainment of the standard; and

4. A source whose allowable emissions would otherwise significantly contribute to an existing violation of an ambient air quality standard in an area for which there is no approved attainment plan shall obtain an air quality impact reduction (offset) sufficient to prevent the violation.

C. Any proposed air contaminant sources included in the scope of this regulation and emitting Volatile Organic Compounds must, prior to obtaining an air emission license, obtain an emission reduction (offset) of equivalent emissions from any up-wind sources within 200 miles.

Reductions in nitrogen oxide emissions as NO_2 may be used to offset Volatile Organic Compound emissions. Up-wind sources are those south and west of the proposed source, or as approved by the Board on a case-by-case basis.

D. Any offset obtained under this section must be legally enforceable prior to the issuance of any air emission license and in effect by the time of start up of the proposed source.

E. No offset credit will be allowed for any emission reduction or air quality improvement gained by achieving compliance with existing regulations or new implementation plan provisions.

3. Exemptions

A. A source subject to this regulation may be wholly or partially exempted by the Board in cases where the source must switch fuels due to the lack of adequate fuel supplies or where the source is required by governmental regulations to install additional process equipment that causes additional emissions. This exemption may be granted only if (a) the source demonstrates that it made its best efforts to obtain sufficient offsets to comply with this regulation and that such efforts were unsuccessful or the source has secured all available offsets and (b) the source will continue to seek the necessary offset and obtain it when it becomes available.

4. Banking

A. The base time for determining the offset is January 1, 1979. Any emission reductions or air quality impacts that are collected or occur after this date may be retained by the Department and be available for use as offsets for future growth. Any banked offset established by means of voluntary emission reductions beyond that level required by the applicable emission standards will be retained by the Department for a period of two years for the sole use of that source. If not used in this period any further reservation of the banked offset is subject to determination by the Board. Any use of banked offsets requires specific consultation by the Department with municipal, county and other regional officials and must be consistant with land use and development plans in that area. A public hearing must be held on the use of a banked offset if a legitimate request is received.

These regulations shall be effective upon filing with the Office of the Secretary of State and shall supersede regulations on this subject adopted March 28, 1979.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Chapter 114 CLASSIFICATION OF AIR QUALITY CONTROL REGIONS

1. For Prevention of Significant Deterioration Purposes the Board Hereby Classifies Air Quality Control Regions as Follows:

A. The Metropolitan Portland Air Quality Region, Portland Peninsula Air Quality Region, Central Maine Air Quality Region, Downeast Air Quality Region, the Aroostook Air Quality Control Region, and Northwest Maine Air Quality Region shall be Class II Regions.

B. The Department shall have the authority to designate certain Regions or portions thereof as a non-attainment area according to the criterial and procedures set forth in the Federal Clean Air Act, as amended.

C. The Board hereby recognizes the classification and regulatory requirements of those federal lands which have been established as mandatory Class I areas by the Federal Clean Air Act: Acadia National Park located in the Downeast Air Quality Region; Moosehorn National Wildlife Refuge located in the Downeast Air Quality Region; and the Roosevelt Campobello International Park located in New Brunswick, Canada.

D. Lands within the exterior boundaries of reservations of federally recognized Indian tribes may be redesignated only by the appropriate Indian governing body under the terms and procedures set forth in the Clean Air Act, 42 U.S.C.A. § 7474(e).

E. Prior to the proposal of any redesignation the Board shall hold a public hearing which shall be conducted in the area proposed to be redesignated. Prior to the public hearing a report shall be made available with a description and analysis of health, environmental, economic, social and energy impacts of the proposed redesignation. Should the area proposed for redesignation include or be deemed to effect federally owned lands, the Board shall consult with the appropriate federal land manager prior to such redesignation.

2. The Board classifies the following areas as non-attainment areas:

A. For Total Suspended Particulates

1. The municipality of Augusta

2. The municipality of Thomaston

3. The municipalities of Bangor and Brewer

4. The municipality of Baileyville

B. For Sulfur Dioxide

1. The municipality of Millinocket

C. For Carbon Monoxide

1. In the municipality of Lewiston the area bounded by and including Maine Street, Park Street, Willow Street and Canal Street.

2. In the municipality of Bangor the area bounded by and including Kenduskeag Stream, Franklin Street, Columbia Street, and Water Street.

D. For Ozone (photochemical oxidants)

1. All of the Metropolitan Portland, Portland Peninsula, Central Maine Air Quality Control Regions.

These regulations shall be effective upon filing with the Office of the Secretary of State and shall supersede all previous regulations on this subject.